

# TM 110.03

## Supplementary set - gear wheels



### Description

#### ■ mode of operation of single-stage and multistage gears

Supplementary set TM 110.03 extends the scope of experiments which can be performed with TM 110 with the issues single-stage and multistage gear and conversion of rotation into linear motion. A rack is used to demonstrate the conversion of rotation into linear motion and vice versa.

The base element is an aluminium rail which can be mounted on the panel of TM 110 using clamping elements.

All parts are clearly laid out and well protected on a storage system. The storage systems are stackable, providing for space-saving storage.

### Learning objectives/experiments

- transmission ratio of speed and moment on a single-stage gear
- influence of intermediate wheels on the direction of rotation
- transmission ratio on a two-stage gear
- conversion of rotation into linear motion and vice versa

### Specification

- [1] supplementary set for experimental unit TM 110
- [2] experiments with single-stage and multistage gears
- [3] aluminium spur wheels with ball bearing mounts
- [4] quick assembly of the elements
- [5] deflection roller, mounting rail and gear wheels made of anodised aluminium
- [6] storage system for the components

### Technical data

Aluminium spur gears

- modulus:  $m=2\text{mm}$
- number of teeth:  $z=20, 25, 30, 40, 50, 60$
- ball bearing gear wheel mounts, secured by thrust pads to grooved pins

Rack

- modulus:  $m=2\text{mm}$
- length:  $L=300\text{mm}$

Mounting rail anodised aluminium

- $L \times W \times H: 760 \times 30 \times 30\text{mm}$

$L \times W \times H: 604 \times 404 \times 132\text{mm}$  (storage system)

Weight: approx. 12kg

### Scope of delivery

- 1 supplementary set
- 1 storage system with foam inlay
- 1 set of instructional material

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Required accessories

TM 110

Fundamentals of statics